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DATE MAILED: 10/03/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------|---------------------|----------------------|---------------------|-------------------|--|
| 10/040,906 | 01/09/2002 | Greta Arnaut | 58764.000036 | 58764.000036 1498 | |
| 21967 | 7590 10/03/2006 | | EXAMINER | | |
| HUNTON & | WILLIAMS LLP | KUBELIK, ANNE R | | | |
| INTELLECT | UAL PROPERTY DEPART | TMENT | | | |
| 1900 K STREET, N.W. | | | ART UNIT | PAPER NUMBER | |
| SUITE 1200 | | | 1638 | | |
| WASHINGT | ON DC 20006_1100 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | | |
|-----------------|---------------|--|--|
| 10/040,906 | ARNAUT ET AL. | | |
| Examiner | Art Unit | | |
| Anne R. Kubelik | 1638 | | |

| Before the Filing of an Appeal Brief | | | | | | | |
|--|---|--|---|--|--|--|--|
| Before the Filling of all Appeal Brief | Examiner | Art Unit | | | | | |
| | Anne R. Kubelik | 1638 | | | | | |
| The MAILING DATE of this communication appoint | ears on the cover sheet with the c | orrespondence add | ress | | | | |
| THE REPLY FILED 11 September 2006 FAILS TO PLACE TH | IS APPLICATION IN CONDITION F | OR ALLOWANCE. | | | | | |
| 1. The reply was filed after a final rejection, but prior to or of this application, applicant must timely file one of the folloplaces the application in condition for allowance; (2) a Notal Request for Continued Examination (RCE) in compliantime periods: | n the same day as filing a Notice of wing replies: (1) an amendment, affortice of Appeal (with appeal fee) in contents and ce with 37 CFR 1.114. The reply must | Appeal. To avoid aba fidavit, or other evider compliance with 37 C | nce, which FR 41.31; or (3) | | | | |
| a) The period for reply expires months from the mailir b) The period for reply expires on: (1) the mailing date of this no event, however, will the statutory period for reply expire Examiner Note: If box 1 is checked, check either box (a) or | Advisory Action, or (2) the date set forth later than SIX MONTHS from the mailing (b). ONLY CHECK BOX (b) WHEN THE | g date of the final rejecti | on. | | | | |
| TWO MONTHS OF THE FINAL REJECTION. See MPEP 7 Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of extender 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office late may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL | e on which the petition under 37 CFR 1.1 ktension and the corresponding amount shortened statutory period for reply origor or than three months after the mailing da | of the fee. The appropring in ally set in the final Offi | iate extension fee ce action; or (2) as | | | | |
| 2. The Notice of Appeal was filed on 11 September 2006. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). AMENDMENTS | | | | | | | |
| 3. The proposed amendment(s) filed after a final rejection, | but prior to the date of filing a brief. | will not be entered b | ecause | | | | |
| (a) They raise new issues that would require further co | · | | | | | | |
| (b) They raise the issue of new matter (see NOTE below); | | | | | | | |
| (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or | | | | | | | |
| (d) They present additional claims without canceling a | | ected claims. | | | | | |
| NOTE: (See 37 CFR 1.116 and 41.33(a)) 4. The amendments are not in compliance with 37 CFR 1.1 | | mpliant Amandment | (DTOL 224) | | | | |
| 5. Applicant's reply has overcome the following rejection(s | | impliant Amendment | (FIOL-324). | | | | |
| 6. Newly proposed or amended claim(s) would be a | | timely filed amendme | ent canceling the | | | | |
| non-allowable claim(s). 7 So For purposes of appeal, the proposed amendment(s): a) | ☐ will not be entered or b\ ☑ will | Il bo optored and an a | vynlanation of | | | | |
| 7. Sor purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is protected that the status of the claim(s) is (or will be) as follows: Claim(s) allowed: <u>57,63-69,71,74,76,77,79 and 81</u> . | | ii be entered and an e | explanation of | | | | |
| Claim(s) objected to: Claim(s) rejected: 85-86. | | | | | | | |
| Claim(s) rejected. <u>85-88.</u> Claim(s) withdrawn from consideration: | | | | | | | |
| AFFIDAVIT OR OTHER EVIDENCE | | | | | | | |
| 3. The affidavit or other evidence filed after a final action, be because applicant failed to provide a showing of good ar was not earlier presented. See 37 CFR 1.116(e). | | | | | | | |
| The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to showing a good and sufficient reasons why it is necessar | overcome <u>all</u> rejections under appeary and was not earlier presented. S | al and/or appellant fai ee 37 CFR 41.33(d)(1 | ls to provide a l). | | | | |
| 10. The affidavit or other evidence is entered. An explanation of the control | on of the status of the claims after e | ntry is below or attach | ned. | | | | |
| 11. The request for reconsideration has been considered by See Continuation Sheet. | ut does NOT place the application in | n condition for allowar | nce because: | | | | |
| 12. Note the attached Information Disclosure Statement(s). 13. Other: | (PTO/SB/08) Paper No(s) | | | | | | |
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PRIMARY EXAMINE

Continuation of 5. Applicant's reply has overcome the following rejection(s):

102(e); 103(a) of claims 58, 77 and 80 over '293 in view of Audtho and further in view of Schenpf; 103(a) of claims 71 and 76 over '293 in view of Audtho and further in view of Schenpf and further in view of '711, '542 and '608: .

Continuation of 11. does NOT place the application in condition for allowance because:

103(a) of claims 85-86 over '293 in view of Audtho and further in view of Schenpf and further in view of '711, '542 and '608:

Applicant urges that '293 fails to disclose N-terminally truncated SEQ ID NO:2. This is not found persuasive because the rejection stated that '293 discloses SEQ ID NO:2, not that it disclosed N-terminally truncated SEQ ID NO:2.

Applicant urges that '293 provides no motivation to combine with any other reference. This is not found persuasive because the motivation comes from the other references.

Applicant urges that Audtho is primarily concerned with the serial digestion is Cry2A1, not with the production of a chimeric gene comprising truncated SEQ ID NO:2; Cry2Aa1 has a unique mode of action among Cry proteins. This is not found persuasive. CryAa1 was being compared to Cry1 and Cry3 proteins, not to other Cry2 proteins. Audtho showed that the proteins itself is activated by Nterminal truncation; one of skill in the art would thus have motivation to express truncated proteins because these truncated proteins would be activated upon expression, without needing truncation within the insect gut.

Applicant urges that Schnepf is directed to proteins other than SEQ ID NO:2, and the truncation statement is directed to Cry1A proteins, citing 4 exhibits.

This is not found persuasive because there is no mention that the proteins are Cry1A and that it wouldn't work with other Cry proteins. The exhibits will not

be considered because Applicant fails to provide a showing of good and sufficient reasons why the evidence was necessary and not presented earlier.

Applicant urges that the truncated proteins in Schnepf resulted in comparatively low expression, thus not providing motivation to combine; Schnepf instead focuses on other strategies to avoid insect resistance. This is not found persuasive because Schnepf states that expression was improved over non-truncated (pg 793); improved expression is also motivation.

Applicant urges that '771 is not drawn to SEQ ID NO:2, and the focus of the patent was on the promoters not dependent upon RNA Pol III. '711 is withdrawn from the rejection due to Applicant's amendment of claim 71.

Applicant urges that '542 does not disclose SEQ ID NO:2 and showed that adding a transit peptide resulted in abnormal phenotypes and decreased expression. This is not found persuasive because the superior expression with the Cry2Ab protein provides motivation to combine.

Applicant urges that '608 does not disclose SEQ ID NO:2 and is concerned with a specific Cry1Ab gene. This is not found persuasive because "608 teaches the use of the CaMV 3 termination sequence in expression of a Cry protein.

In response to Applicant's argument that Audtho, Schnepf, '542, '771 and 608 do not teach SEQ ID NO:2, Applicant's is arguing against the references individually; one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

2